

***LIPOSOMAL COMPOSITIONS FOR THE DELIVERY  
OF NUCLEIC ACID CATALYSTS***

**ABSTRACT OF THE DISCLOSURE**

The present invention relates to compositions and methods for delivering nucleic acid catalysts *e.g.*, vascular endothelial growth factor receptor (VEGF-R-1) ribozyme, into a biological system.

1. A liposomal composition comprising a nucleic acid catalyst and a lipophilic carrier.

2. The composition of claim 1, wherein the nucleic acid catalyst is a ribozyme.

3. The composition of claim 1, wherein the nucleic acid catalyst is a vascular endothelial growth factor receptor (VEGF-R-1) ribozyme.

4. A method for delivering a nucleic acid catalyst into a biological system, comprising the step of administering to the biological system a liposomal composition comprising the nucleic acid catalyst and a lipophilic carrier.

5. The method of claim 4, wherein the nucleic acid catalyst is a ribozyme.

6. The method of claim 4, wherein the nucleic acid catalyst is a vascular endothelial growth factor receptor (VEGF-R-1) ribozyme.

7. A liposomal composition comprising a nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid.

8. The composition of claim 7, wherein the phospholipid is a cationic phospholipid.

9. The composition of claim 7, wherein the phospholipid is a non-cationic phospholipid.

10. A method for delivering a nucleic acid catalyst into a biological system, comprising the step of administering to the biological system a liposomal composition comprising the nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid.

11. The method of claim 10, wherein the phospholipid is a cationic phospholipid.

12. The method of claim 10, wherein the phospholipid is a non-cationic phospholipid.

13. A liposomal composition comprising a nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration.

14. The composition of claim 13, wherein the phospholipid is a cationic phospholipid.

15. The composition of claim 13, wherein the phospholipid is a non-cationic phospholipid.

16. A method for delivering a nucleic acid catalyst into a biological system, comprising the step of administering to the biological system a liposomal composition comprising the nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration.

17. The method of claim 16, wherein the phospholipid is a cationic phospholipid.

18. The method of claim 16, wherein the phospholipid is a non-cationic phospholipid.

19. A liposomal composition comprising a nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration.

20. The composition of claim 19, wherein the phospholipid is a cationic phospholipid.

21. The composition of claim 19, wherein the phospholipid is a non-cationic phospholipid.

22. A method for delivering a nucleic acid catalyst into a biological system, comprising the step of administering to the biological system a liposomal composition comprising the nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration.

23. The method of claim 22, wherein the phospholipid is a cationic phospholipid.

24. The method of claim 22, wherein the phospholipid is a non-cationic phospholipid.

25. A liposomal composition comprising a nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration.

26. The composition of claim 25, wherein the phospholipid is a cationic phospholipid.

27. The composition of claim 25, wherein the phospholipid is a non-cationic phospholipid.

28. A method for delivering a nucleic acid catalyst into a biological system, comprising the step of administering to the biological system a liposomal composition comprising the nucleic acid catalyst and a lipophilic carrier, wherein the lipophilic carrier is a phospholipid, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration, and the liposomal composition is in a form suitable for intravenous administration.

29. The method of claim 28, wherein the phospholipid is a cationic phospholipid.

30. The method of claim 28, wherein the phospholipid is a non-cationic phospholipid.